COMPUTER AUTOMATED PROCESS FOR
VECTORIZATION OF RASTER IMAGES

ABSTRACT

A computer automated process for vectorizing raster images to create usable graphic files which can be manipulated by CAD software. The present process makes use of the geometric relationship among the graphic elements contained in the raster image and keeps the graphics elements as a whole during the process of vectorization. The present process not only recognizes the whole line, but also recognizes all the lines intersecting it. The process requires a central processing unit a of a computer programmed with the appropriate instructions to analyze lines found in the bitmap image, together with all intersections and shapes associated with the line in the bitmap image and process that information in accordance with predefined algorithms to create a usable graphic image file. As each line is recognized it is vectorized and it is then deleted from the bitmap image to speed up the process of vectorization.